217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Pechiney Plastic Packaging
Attn: Tom Nelson, Plant Manager
475 North Kirk Road
Batavia, Illinois 60510

Application No.: 01050095 I.D. No.: 089010ACC
Applicant's Designation: PRESS #56 Date Received: May 31, 2001
Subject: Printing, Coating and Laminating
Date Issued: March 29, 2002
Location: 475 North Kirk Road, Batavia

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new in line gravure deck with total enclosure on press P56 and the venting of the existing parts washer to the new Megtec oxidizer and a new Megtec oxidizer controlling P54, P55, P56,L62, L63, L64, and the parts washer as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1.0 Unit Specific Conditions

1.1 Unit 01: Flexographic Presses

1.1.1 Description

01 - Three flexographic printing presses are used to print on paper, film, metallic foil, and/or composite materials, with the capability of using compliant low-VOM materials using water-based or solvent-based materials. The printing or coating is a continuous process performed on rollstock. Each printing press has gas-fired dryer(s) to dry inks and coatings. VOM emissions resulting from the use of solvent-based materials are controlled by oxidation system. Fuel combustion emissions results from the use of natural gas in the dryers.

1.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	3-Flexographic Printing Lines (Lines P54, P-55, and P56)	P54-1991, P55-1994, and P56-1997	Regenerative and Recuperative Thermal Oxidation Systems

1.1.3 Applicability Provisions and Applicable Regulations

a. An "affected printing line" for the purpose of these unit-specific conditions is each flexographic press (P54, P55, and P56) and associated dryer(s), used to perform printing. Each affected printing line is identified in Condition 1.1.2.

b. As the coating lines do not use low-VOM compliant coating each affected printing line is subject to the requirements of 35 IAC Subpart H: Printing and Publishing and shall comply with the requirements of 35 IAC 218.401(b) or (c).

Each affected printing line equipped with a capture system and control device complying by 35 IAC 218.401(c) shall not operate the affected printing line unless the owner or operator meets the requirements below.

i. An incineration system is used which reduces the captured VOM emissions by at least 90 percent by weight, or

ii. The affected printing line is equipped with a capture system and control device that provides an overall reduction in VOM emissions of at least 60 percent where a flexographic printing line is employed, and

iii. The control device is equipped with the applicable monitoring equipment specified in 35 IAC 218.105(d)(2) and except as provided in 35 IAC 218.105(d)(3), the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use, and

iv. The capture system and control device is operated at all times when the affected printing line is using non-compliant inks and/or coatings. Under such conditions, the Permittee shall demonstrate compliance with this subsection by using the applicable capture system and control device test methods and procedures specified in 35 IAC 218.105(c) through (f), or other methods and procedures approved by the Illinois EPA or in accordance with current USEPA guidelines and approval is granted by the Illinois EPA and by complying with the recordkeeping and reporting requirements specified in 35 IAC 218.404(e).

1.1.4 Non-Applicability of Regulations of Concern

a. The affected printing lines are not subject to 35 IAC 218.204(c), Coating Operations - Paper Coating, as the paper coating limitation does not apply to a line on which printing is performed which complies with the emission limitations in 35 IAC 218.401 [35 IAC 218.204(c)].

b. This permit is issued based on the affected printing press not being subject to the 40 CFR 60, Subpart FFF - Standards of Performance for Flexible Vinyl and Urethane Coating and Printing, because the affected printing presses are not used to coat flexible vinyl or urethane products which excludes flexible packaging.

c. The affected printing lines are not subject to the requirements of 35 IAC 218 Subpart G: Use of Organic Materials [35 IAC 218.402(b)].

1.1.5 Operation and Control Requirements

a. For each affected printing line complying by 35 IAC 218.401(c) the control device shall be equipped with the applicable monitoring equipment, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.401(c)(5)].

i. For each affected printing line complying by 35 IAC 218.401(c) the capture system and control device are operated when the subject printing line is in operation [35 IAC 218.401(c)(6)].

ii. The minimum overall control efficiency, including capture and destruction shall be at least the following:

Affected Printing Line	Overall Control Efficiency
P54	93.50%
P55	85.50%
P56	85.50%
Flexographic Decks	85.50%
In Line Gravure Deck	95.0%

The above limitations contain revisions to previously issued Construction Permit 96120080. The source has requested that Illinois EPA establish conditions in this permit that allow various refinements from the

previous conditions, consistent with the information provided in this application. Specifically, the overall control efficiency limit for P54 has been modified.

iii. For each affected printing line complying by 35 IAC 218.401(c), not withstanding 35 IAC 218.107, seasonal shutdown of the oxidizers is not permitted. This limitation was established in Construction Permit 96120080.

iv. Natural gas shall be the only fuel fired in the press dryer(s) of each affected printing line.

b. i. During such periods the Megtec oxidizer shall be operated and maintained with a minimum combustion chamber temperature of 1600°F, hourly average.

ii. Upon written approval by the Illinois EPA, the Permittee may be allowed to adjust the minimum combustion chamber temperature of the Megtec oxidizer if approved source test data demonstrates compliance with the Special Conditions of this permit and all state and federal regulations at the adjusted temperature and operating conditions.

1.1.6 Emission Limitations

The affected printing lines are subject to the following:

a. Emissions of VOM shall not exceed the following limits:

Affected Printing Line	VOM Emissions (Ton/Mo)	(Ton/Yr)
P54	1.3	13.0
P55	2.5	24.9
P56 (Flexo Deck)	2.5	24.9
P56 (Gravure Deck)	1.39	13.9

The above limitations contain revisions to previously issued Permit 96120080. The Permittee requested that Illinois EPA establish conditions in this permit that allow various refinements from the previous conditions. Specifically the VOM emission limits have all been decreased, therefore making the limits more stringent.

The source has addressed the applicability and compliance of 35 IAC 203, NSR (See Attachment 1). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules.

1.1.7 Testing Requirements

a. The VOM content of each coating and ink shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105(a) [35 IAC 218.401(a)].

b. The Permittee may determine the volatile organic matter content of materials based on formulation data, and may rely on volatile matter content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR Part 60, Appendix A, the applicable test method shall govern.

c. When requested by the Illinois EPA, performance testing shall be conducted in accordance with the applicable test methods and procedures specified in 35 IAC 218.105(c) through (f) [35 IAC 218.401(c)(6)] unless another method is approved by the Illinois EPA or in accordance with current USEPA guidelines and approval is granted by the Illinois EPA.

1.1.8 Monitoring Requirements

The Megtec and Smith thermal oxidizers shall use an Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained and operated according to vendor specifications at all times the oxidizers are in use. The continuous monitoring equipment shall monitor and record the combustion chamber temperature of each oxidizer, as specified in 35 IAC 218.105(d)(2) [35 IAC 218.401(c)(5)].

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected printing line to address compliance with Condition 1.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. Each affected printing line complying by 218.401(a) is subject to the recordkeeping requirements of 35 IAC 218.404(c), which provides that the Permittee of an affected printing line shall collect and record

all of the following information each day for each affected printing line and maintain the information at the source for a period of three years:

i. The name and identification number of each coating and ink as applied on each affected printing line.
ii. The VOM content of each coating and ink as applied each day on each affected printing line.

b. Each affected printing line complying by 218.401(b) is subject to the recordkeeping requirements of 35 IAC 218.404(d), which provides that the Permittee shall collect and record all of the following information each day for each printing line and maintain the information at the source for a period of three years:

i. The name and identification number of each coating and ink as applied on each printing line.

ii. The VOM content and the volume of each coating and ink as applied each day on each printing line.

iii. The daily-weighted average VOM content of all coatings and inks as applied on each printing line.

c. The owner or operator of an affected printing line shall collect and record all of the following information for each printing line and maintain the information at the source for a period of three years:

i. The name and identification number of each VOM containing material used.

ii. The VOM content (wt. %) of each VOM containing material used.

iii. Usage of each VOM containing material when an oxidation system is in operation controlling that affected printing line, (lb/mo).

iv. When in operation, the actual overall VOM control efficiency the oxidation system provides for that affected printing line. (% VOM reduction)

v. Usage of each VOM containing material when the oxidation system is not in operation for that affected printing line, (lb/mo).

vi. VOM emissions calculated in accordance with the procedures given in Condition 1.1.2 (lb/mo and ton/yr).

d. The owner or operator of an affected printing line shall collect and record all of the following information for the printing line dryers and control devices and maintain the information at the source for a period of three years:

i. Plant wide fuel usage (mmscf/yr).

ii. Fuel combustion emissions calculated in accordance with the procedures given in Condition 1.1.12 (ton/yr).

1.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of an affected printing line with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee of an affected printing line shall notify the Illinois EPA in the following instances:

i. Any record showing violation of Section 218.401(a), (b), or (c); as specified by Conditions 1.1.3(b)(i), (ii), and (iii), respectively, shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

ii. At least 30 calendar days before changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(a) to 35 IAC 218.401(b) or (c), the Permittee shall comply with all requirements of 35 IAC 218.404(d)(1) and (e)(1), respectively. Upon changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(a) to 35 IAC 218.401(b) or (c), the Permittee shall comply with all requirements of 35 IAC 218.404(d) or (e), respectively.

iii. At least 30 calendar days before changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(b) to 35 IAC 218.401(a) or 35 IAC 218.401(c), the Permittee shall comply with all requirements of 35 IAC 218.404(c)(1) or (e)(1), respectively. Upon changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(b) to 35 IAC 218.401(a) or (c), the Permittee shall comply with all requirements of 35 IAC 218.404(c) or (e), respectively.

iv. At least 30 calendar days before changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(c) to 35 IAC 218.401(a) or (b), the Permittee shall comply with all requirements of 35 IAC 218.404(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 IAC 218.401 from 35 IAC 218.401(c) to 35 IAC 218.401(a) or (b), the Permittee shall comply with all requirements of 35 IAC 218.404(c) or (d), respectively.

b. Any record showing violation of the operating and control requirements of Condition 1.1.5 and emission limitations of Condition 1.1.6, shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

In the event of a malfunction or breakdown of an oxidizer, the Permittee is authorized to continue operation of an affected printing line if emissions are directed to the facility's other oxidizer.

1.1.12 Compliance Procedures

a. Compliance with Condition 1.1.3(b) shall be addressed by the testing requirements of Condition 1.1.7.

b. i. Compliance with Condition 1.1.6 for each affected printing line shall be addressed by the recordkeeping requirements of Condition 1.1.9 and the formula(s) given below:

$$E_V = \sum_{i=1}^{n} C_i W_i (1 - D_V)$$

Where:

v = Printing Line Identification

n = The total number of VOM containing materials applied on line v

E_v = Total VOM emissions from line v

C_i = Quantity of VOM containing material used on line v each month (lb/mo)

W_i = VOM content of VOM containing material applied on line v each month (wt. % VOM)

D_v = Overall control efficiency (combined capture and control efficiencies) of the device(s) controlling line v.

ii. Compliance with the annual limits shall be addressed on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

2.1 Unit 02: Coating Lines

2.1.1 Description

02 - Three extruder laminator lines and one coating line are used to apply a decorative, protective or functional coating or ink on flexible packaging consisting of paper, film, metallic foil and/or composite materials, with the capability of using compliant low-VOM materials or solvent based materials. The coating or printing is a continuous process performed on rollstock. The extruder laminator/coating process lines have gas-fired dryers to dry liquid coatings and inks. VOM emissions can result from the use of solvent-based materials, and compliant low-VOM materials. Fuel combustion emissions result from the use of natural gas in the dryers.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
02	3-Extruder Laminator Lines (L62, L64, L65, and 1-Coating Line L63	L62-1978, L63-1985, L64-1991, and L65-1997	Regenerative and Recuperative Thermal Oxidation Systems Extruder/Laminator L64 and L65 are not currently connected to emission control equipment

2.1.3 Applicability Provisions and Applicable Regulations

a. An "affected coating line" for the purpose of these unit-specific conditions is each extruder/laminator line or coating line (l62, L63, L64, and L65) and associated dryer(s). Each affected coating line is identified in Condition 2.1.2.

b. When processing non-compliant coating(s) each affected coating line is subject to 35 IAC 218.207 Alternative Emissions Limitations, which provides that; no owner or operator of a coating line subject to 35 IAC 218.204(c); Paper Coating, complying by 35 IAC 218.207(b)(1), and equipped with a capture system and control device shall operate the subject coating line unless:

i. The affected coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency, [35 IAC 218.107(b)];

ii. An affected coating line's capture system and control device are operated at all times the coating line is in operation, [35 IAC 218.207(a)]; and

iii. The Permittee demonstrates compliance through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in 35 IAC Section 218.105 and the recordkeeping and reporting requirements specified in 35 IAC Section 218.211(e); and the control device is equipped with the applicable monitoring equipment specified in Section 218.105(d) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

c. When processing compliant coatings, of each affected coating line (including L62, L63, L64, and L65) shall not apply at any time any coating in which the VOM content (minus water and any compounds specifically exempt from the definition of VOM) exceeds the following limitations [35 IAC 218.204(c)]:

kg/liter	lb/gal
0.28	2.3

2.1.4 Non-Applicability of Regulations of Concern

The affected coating line is not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, which excludes the affected coating lines from these requirements.

2.1.5 Operation and Control Requirements

a. The control device(s) shall be equipped with the applicable monitoring equipment; calibrated, operated and maintained according to vendor specifications at all times that the control device is in use [35 IAC 218.207(a)].

b. i. The capture system and control device for an affected coating line shall be operated at all times that the subject coating line utilizes non-compliant ink or coating materials [35 IAC 218.207(a)].

ii. The minimum overall control efficiency, including capture and destruction shall be at least the following:

Affected Coating Line	Overall Control Efficiency
L62	95.00%
L63	81.00%

The above limitations were established in Construction Permit 96120080 pursuant to 35 IAC Part 203. These limits ensure that the construction/modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to 35 IAC Part 203 [T1].

iii. For each affected coating line complying with 35 IAC 218.207, not withstanding 35 IAC 218.107, seasonal shutdown of the oxidizers is not permitted. This limitation was established in Construction Permit 96120080.

c. Natural gas shall be the only fuel fired in the coating oven(s) and control equipment of each affected coating line.

2.1.6 Emission Limitations

The affected coating lines are subject to the following:

a. Emissions of VOM shall not exceed the following limits:

Affected Coating Line	VOM Emissions (Ton/Mo)	(Ton/Yr)
L62	0.575	5.75
L63	1.23	12.27
L64	0.8	0.80
L65	0.05	0.50

The above limitations contain revisions to previously issued Permit 96120080. The Permittee has requested that Illinois EPA establish conditions in this permit that allow various refinements from the previous conditions, consistent with the information provided in this application.

2.1.7 Testing Requirements

a. When requested by the Illinois EPA, performance testing of each capture system and control shall be conducted in accordance with the applicable test methods and procedures specified in 35 IAC 218.105 [35 IAC 218.211(a)] unless another method is approved by the Illinois EPA or in accordance with current USEPA guidelines and approval is granted by the Illinois EPA.

b. The VOM content of each ink or coating material shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105 [35 IAC 218.211(a)].

2.1.8 Monitoring Requirements

The Megtec and Smith regenerative thermal oxidizers shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained and operated according to vendor specifications at all times the oxidizers are in use. The continuous monitoring equipment shall monitor and record the combustion chamber temperature of each oxidizer, as specified in 35 IAC 218.105(d)(2) [35 IAC 218.207(a)].

2.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected coating line to address the compliance with Condition 2.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. Each affected coating line complying by the Alternative Emission Limitations of 35 IAC 218.207(c) is subject to the recordkeeping requirements of 35 IAC 218.211(e), which provides that:

i. The Permittee shall collect and record all of the following information each day for each affected coating line and maintain the information at the source for a period of three years:

A. Control device monitoring data.

B. A log of operating time for the capture system, control device, monitoring equipment and the associated coating line. Alternatively, for malfunction-related downtimes associated with extruder laminator/coating line emissions, the Permittee may provide immediate notification to the Illinois EPA of downtimes of capture systems, control devices, or monitoring equipment. However, the Permittee must abide by the malfunction and breakdown provisions in Condition 2.1.3.

C. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

b. Each affected coating line complying by the Paper Coating Emission Limitation of 35 IAC 218.204(c) is subject to the recordkeeping requirements of 35 IAC 218.211(c), which provides that:

i. The Permittee shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:

A. The name and identification number of each coating as applied on each affected coating line.

B. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line.

c. The Permittee shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. The name and identification number of each VOM containing material used.

ii. The VOM content (wt. %) of each VOM containing material used.

iii. Usage of each VOM containing material when an oxidation system is in operation controlling that affected coating line, (lb/mo).

iv. When in operation, the actual overall VOM control efficiency the oxidation system provides for that affected coating line, (% VOM reduction).

v. Usage of each VOM containing material when the oxidation system is not in operation for that affected coating line, (lb/mo).

vi. VOM emissions calculated in accordance with the procedures given in Condition 2.1.12 (lb/mo and ton/yr).

d. The owner or operator of an affected coating line shall collect and record all of the following information for the coating line dryer and control devices and maintain the information at the source for a period of three years:

i. Plant wide fuel usage (mmscf/yr).

ii. Fuel combustion emissions calculated in accordance with the procedures given in Condition 2.1.12 (ton/yr).

2.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of an affected coating line with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Each affected coating line is subject to reporting requirements of 35 IAC 218.207(e)(3), which provides that:

i. The owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:

A. Any record showing violation of 35 IAC Section 218.207 or 218.204, shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

B. At least 30 calendar days before changing the method of compliance with 35 IAC 218.207 from 35 IAC Section 218.207 to 35 IAC Section 218.204, the owner or operator shall comply with all requirements of 35 IAC 218.211(c)(1) and (d)(1), respectively. Upon changing the method of compliance with 35 IAC Section 218.207 from 35 IAC 218.207 to 35 IAC 218.204 or 218.205, the owner or operator shall comply with all requirements of 35 IAC 218.211(c) or (d) of this Section, respectively.

C. Any record showing violation of the operating and control requirements of Condition 2.1.5 and emission limitations of Condition 2.1.6, shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

2.1.11 Operational Flexibility/Anticipated Operating Scenarios

In the event of a malfunction or breakdown of an oxidizer, the Permittee is authorized to continue operation of an affected printing line if emissions are directed to the facility’s other oxidizer.

2.1.12 Compliance Procedures

a. Compliance with Condition 2.1.3(b) shall be addressed by the testing requirements of Condition 2.1.7.

b. Compliance with Condition 2.1.3(c) is assumed to be achieved by the normal work practices and maintenance activities inherent in the operation of the affected coating lines.

c. i. Compliance with Condition 2.1.6 for each affected coating line shall be addressed by the recordkeeping requirements of Condition 2.1.9 and the formula(s) given below:

$$E_V = \sum_{i=1}^{n} C_i W_i (1 - D_V)$$

Where:

v = Coating Line Identification

n = The total number of VOM containing materials applied on line v

E_v = Total VOM emissions from line v

C_i = Quantity of VOM containing material used on line v each month (lb/mo)

W_i = VOM content of VOM containing material applied on line v each month (wt. % VOM)

D_v = Overall control efficiency combined capture and control efficiency) of the device(s) controlling line v.

ii. Compliance with the annual limits shall be addressed on a monthly basis from the sum of the data for each line for the current month plus the preceding 11 months.

3.0 Unit 03: Cold Cleaning Parts Washer

3.1.1 Description

03 - One cold cleaning parts washer machine uses solvent to clean printer and coater parts. The parts are cleaned and drained in an enclosed chamber. Dirty solvent from the parts washer is circulated to an on-site distillation

unit for recycling, and clean solvent from the distillation unit is circulated back to the parts washer. The parts washer is designed and maintained to achieve 100% capture of VOM emissions with the captured emissions controlled by a thermal oxidizer or similar control unit which achieves a minimum of 95% destruction efficiency

3.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
03	Cold Cleaning Parts Washer	1995	Regenerative and Recuperative Oxidation System

3.1.3 Applicability Provisions and Applicable Regulations

a. The "affected degreaser" for the purpose of these unit-specific conditions is a cold cleaning parts washer as identified in Condition 3.1.2.

b. Each affected degreaser is subject to 35 IAC 218.182; Cold Cleaning, which provides that no owner or operator of a cold cleaning degreaser shall operate the subject cold cleaning parts washer unless:

i. Pursuant to 35 IAC 218.182(a);

A. Waste solvent shall be stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

B. The owner of the degreaser shall be closed when parts are not being handled; and

C. Parts are drained until dripping ceases.

ii. Pursuant to 35 IAC 218.182(b)(1), the degreaser shall be equipped with a cover, which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if;

A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 30°C (100°F);

B. The solvent is agitated; or

C. The solvent is heated above ambient room temperature.

iii. Pursuant to 35 IAC 218.182(b)(2), the degreaser shall be equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:

A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or

B. An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.

iv. Pursuant to 35 IAC 218.182(b)(3)(A), the degreaser shall be equipped with a control device which limits the freeboard height of 7/10 of the inside width of the tank or 91 cm (35 in), whichever is less, if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point.

v. Pursuant to 35 IAC 218.182(b)(4), a permanent conspicuous label summarizing the operating procedure is affixed to the degreaser.

vi. Pursuant to 35 IAC 218.182(b)(5), if a solvent spray is used, the degreaser shall be equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray, unless otherwise permitted by the Illinois EPA.

c. An affected degreaser is subject to 35 IAC 212.321(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified

in subsection (c) or 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

d. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from each affected degreaser. If no odor nuisance exists this limitation shall apply only to photochemically reactive material [35 IAC 218.301].

3.1.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected degreaser not being subject to the provisions of 40 CFR 63, Subpart T: National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning, because the affected degreaser does not apply any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 7-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations.

3.1.5 Operation and Control Requirements

a. Pursuant to 35 IAC 218.182(a);

i. Waste solvent shall be stored in covered containers only and not disposed of in such manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

ii. The cover of the degreaser shall be closed when parts are not being handled; and

iii. Parts are drained until dripping ceases.

b. The degreaser shall be designed and maintained to achieve 100% capture of VOM emissions with the captured emissions vented to a thermal oxidizer or similar control unit which achieves a minimum of 95% destruction efficiency.

3.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5 of the facilities Title V permit, the affected degreaser is subject to the following:

a. Usage and emissions of solvent shall not exceed the following limits:

Solvent Usage[1]		VOM Emissions	
(Lb/Mo)	(Lb/Yr)	(Ton/Mo)	(Ton/Yr)
6,000	60,000	0.15	1.5

[1] Solvent usage is defined as net solvent that is processed through the degreaser (i.e., amount of clean solvent and recycled solvent from the distillation unit to the parts washer minus amount of dirty solvent from the parts washer to the distillation unit).

The above limitations contain revisions to previously issued Permit 96120080. The source has requested that Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the above listed application. Specifically, the VOM emission limits have been decreased due to venting to the thermal oxidizer, therefore making the limits more stringent [T1R].

3.1.7 Testing Requirements

When requested by the Illinois EPA, performance testing shall be conducted in accordance with the applicable test methods and procedures specified in 35 IAC 218.105.

3.1.8 Monitoring Requirements

None

3.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected degreaser to demonstrate compliance with Condition 3, pursuant to Section 39.5(7)(b) of the Act:

a. Quantity of solvent used in the affected degreaser via mass balance (lb/mo and ton/yr).

3.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of an affected degreaser with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

3.1.11 Operational Flexibility/Anticipated Operating Scenarios

In the event of a malfunction or breakdown of an oxidizer, the Permittee is authorized to continue operation of an affected printing line if emissions are directed to the facility's other oxidizer.

4.0 Unit 04: Clean-Up Solvent

4.1.1 Description

04 - Clean-up solvent is used to clean press and coater equipment.

4.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
04	Clean-up Operation	Varies	Cleanup will be performed within a permanent total enclosure and vented to the oxidizer system.

4.1.3 Applicability Provisions and Applicable Regulations

a. The "affected clean-up operation" for the purpose of these unit-specific conditions is the use of solvents for the purpose of cleaning equipment as identified in Condition 4.1.2.

b. At each point of clean-up with solvent, the Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from clean-up. If no odor nuisance exists this limitation shall apply only to photochemically reactive material [35 IAC 218.301].

4.1.4 Non-Applicability of Regulations of Concern

None

4.1.5 Operation and Control Requirements

VOM containing cleaning materials, including used cleaning towels, associated with an affected printing or coating line shall be kept, stored or disposed of in closed containers.

4.1.6 Emission Limitations

The affected clean-up operation is subject to the following:

a. Usage of VOM containing material and the emissions of VOM shall not exceed the following limits:

Affected Clean-Up Operations	VOM Usage (Lb/Mo)	VOM Usage (Lb/Yr)	VOM Emissions (Ton/Mo)	VOM Emissions (Ton/Yr)
L62/L63	20,000	185,000	1.0	9.25
P54/P55/P56 L64/L65	14,000	132,000	0.7	6.6

The above limitations contain revisions to previously issued Permit 96120080. The source has requested that Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in this application. Specifically the VOM emission limits have been increased by 4.2 tons of VOM per year.

4.1.7 Testing Requirements

N/A

4.1.8 Monitoring Requirements

None

4.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected clean-up operation to address compliance with Condition 4, pursuant to Section 39.5(7)(b) of the Act:

a. The name and identification number of each VOM containing material used as a clean-up solvent.

b. The VOM content (wt. %) of each VOM containing material used as a clean-up solvent, as determined by Method 24 analysis of 40 CFR 60, Appendix A, or Material Safety Data Sheet or Product Data Sheet information.

c. Usage of each VOM containing material used as a clean-up solvent on L62 (lb/mo and ton/yr).

d. Usage of each VOM containing material used as a clean-up solvent on P54/P55/P56/L63/L64/L65 (lb/mo and ton/yr).

e. Emissions of VOM from the usage of clean-up solvent on L62 (lb/mo and ton/yr) calculated in accordance with the procedures given in Condition 4.12.

f. Emissions of VOM from the usage of clean-up solvent on P54/P55/P56/L63/L64/L65 (lb/mo and ton/yr) calculated in accordance with the procedures given in Condition 4.1.12.

4.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of an affected clean-up operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

4.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

4.1.12 Compliance Procedures

a. Compliance with Condition 4.1.3(b) is assumed to be achieved by normal work practices and maintenance activities inherent in the clean-up operation.

b. i. Compliance with Condition 4.1.6 for L62 clean-up operation shall be addressed by the recordkeeping requirements of Condition 4.1.9 and the formula(s) given below:

$$V_{L62} = \sum_{i=1}^{n} M_i \; X \; (1 - CE)$$

Where:

n = The total number of VOM containing materials applied as clean-up solvents on L62

V_{L62} = Total VOM emissions from the use of VOM containing material applied as clean-up solvents on L62 each month (lb/mo)

M_i = Quantity of each VOM containing material used as a clean-up solvent on L62 each month (lb/mo)

CE = The actual overall control efficiency (actual combined capture and control efficiency) of the control device(s) controlling L62 (percent)

ii. Compliance with Condition 4.1.6 for P54/P55/P56/L63/L64/L65 clean-up operation shall be addressed by the recordkeeping requirements of Condition 4.1.9 and the formula(s) given below:

$$V_{P54/L65} = \sum_{i=1}^{n} M_i$$

Where:

n = The total number of VOM containing materials applied as clean-up solvents on P54/P55/P56/L63/L64/L65 each month (lb/mo)

$V_{P54/L65}$ = Total VOM emissions from the use of VOM containing material applied as clean-up solvents on P55/P55/P56/ L63/L64/L65 each month (lb/mo)

M_i = Quantity of each VOM containing material used as a clean-up solvent on P54/P55/P56/L63/L64/L65 each month (lb/mo)

5a. This Permit is issued based on the requested changes not being a major modification subject to 35 IAC Part 203, considering the current contemporaneous five year period as addressed by the application.

b. The permit does not shield the Permittee from possible enforcement actions initiated by either USEPA or the Illinois EPA involving this source, including matters addressed by Violation Notice A-1999-00132 by

the Illinois EPA for allegedly failing to comply with 35 IAC Part 203 historically. The Permittee shall, if needed, apply for revision of this permit to address the resolution of any such enforcement action(s).

If you have any questions on this, please call Kevin Smith at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:KLS:jar

cc: Region 1

Attachment 1

NSR Applicability

Table I – Permitted VOM Emissions Increases Associated With The Proposed Modifications

Item of Equipment	Install Date	Emission Increases (Tons/Year)
P56	Mod. 9/01	24.61

Table II – Source-Wide Creditable Contemporaneous VOM Emission Decreases (Tons/year)

Item of Equipment	Removal/Reduction Date	Emission Decreases
P52	11/7/96	1.17
P53	11/7/96	7.14
P53	4/8/97	3.56
L61	4/8/97	5.70
L62	4/8/97	16.10
P53	9/01	0.01
Parts Washer	9/01	13.17
Total		46.85

Table III – Source-Wide Creditable Contemporaneous VOM Emission Increases

Item of Equipment	Year	Emission Increases (Tons/Year)
P56	11/7/96	24.9
Cleanup Solvent	11/7/96	2.20
Parts Washer	4/8/97	14.40
L65	4/8/97	0.50
Total		42.0

Table IV – Net VOM Emissions Change (Tons/Year)

Table I	24.61
Table II	- 46.85
Table III	42.0
Totals	19.76

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